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OIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/783,931

DATE: 12/05/2001  
 TIME: 11:51:31

Input Set : A:\7326-122  
 Output Set: N:\CRF3\11212001\I783931.raw

**ENTERED**

## SEQUENCE LISTING

## C--&gt; 5 (1) GENERAL INFORMATION:

7 (i) APPLICANT: Ish-Horowicz, David  
 8 Henrique, Domingos Manuel Pinto  
 9 Lewis, Julian Hart  
 10 Artavanis-Tsakonas, Spyridon  
 11 Gray, Grace

C--> 13 (ii) TITLE OF INVENTION: ANTIBODIES TO VERTEBRATE DELTA PROTEINS  
 14 AND FRAGMENTS

16 (iii) NUMBER OF SEQUENCES: 94

18 (iv) CORRESPONDENCE ADDRESS:

19 (A) ADDRESSEE: Pennie & Edmonds LLP  
 20 (B) STREET: 1155 Avenue of the Americas  
 21 (C) CITY: New York  
 22 (D) STATE: NY  
 23 (E) COUNTRY: USA  
 24 (F) ZIP: 10036/2711

26 (v) COMPUTER READABLE FORM:

27 (A) MEDIUM TYPE: Diskette  
 28 (B) COMPUTER: IBM Compatible  
 29 (C) OPERATING SYSTEM: DOS  
 30 (D) SOFTWARE: FastSEQ Version 2.0

32 (vi) CURRENT APPLICATION DATA:

C--> 33 (A) APPLICATION NUMBER: US/09/783,931  
 C--> 34 (B) FILING DATE: 15-Feb-2001  
 40 (C) CLASSIFICATION:

37 (vii) PRIOR APPLICATION DATA:

38 (A) APPLICATION NUMBER: 08/981,392  
 39 (B) FILING DATE: 22-DEC-1997

42 (viii) ATTORNEY/AGENT INFORMATION:

43 (A) NAME: Antler, Adriane M.  
 44 (B) REGISTRATION NUMBER: 32,605  
 45 (C) REFERENCE/DOCKET NUMBER: 7326-122

47 (ix) TELECOMMUNICATION INFORMATION:

48 (A) TELEPHONE: 212-790-9090  
 49 (B) TELEFAX: 212-869-8864  
 50 (C) TELEX: 66141 PENNIE

53 (2) INFORMATION FOR SEQ ID NO: 1:

55 (i) SEQUENCE CHARACTERISTICS:

56 (A) LENGTH: 2508 base pairs  
 57 (B) TYPE: nucleic acid  
 58 (C) STRANDEDNESS: single  
 59 (D) TOPOLOGY: linear

W--> 61 (ii) MOLECULE TYPE: DNA

62 (ix) FEATURE:

64 (A) NAME/KEY: Coding Sequence  
 65 (B) LOCATION: 277...2460



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132	Gly	Glu	Lys	Val	Cys	Asn	Pro	Gly	Trp	Lys	Gly	Gln	Tyr	Cys	Thr	Glu	
133	215					220					225					230	
135	CCG	ATT	TGC	TTG	CCT	GGG	TGT	GAC	GAG	CAG	CAC	GGC	TTC	TGC	GAC	AAA	1014
136	Pro	Ile	Cys	Leu	Pro	Gly	Cys	Asp	Glu	Gln	His	Gly	Phe	Cys	Asp	Lys	
137					235					240						245	
139	CCT	GGG	GAA	TGC	AAG	TGC	AGA	GTG	GGT	TGG	CAG	GGG	CGG	TAC	TGT	GAC	1062
140	Pro	Gly	Glu	Cys	Lys	Cys	Arg	Val	Gly	Trp	Gln	Gly	Arg	Tyr	Cys	Asp	
141					250					255						260	
143	GAG	TGC	ATC	CGA	TAC	CCA	GGC	TGC	CTG	CAC	GGT	ACC	TGT	CAG	CAG	CCA	1110
144	Glu	Cys	Ile	Arg	Tyr	Pro	Gly	Cys	Leu	His	Gly	Thr	Cys	Gln	Gln	Pro	
145					265					270						275	
147	TGG	CAG	TGC	AAC	TGC	CAG	GAA	GGC	TGG	GGC	GGC	CTT	TTC	TGC	AAC	CAG	1158
148	Trp	Gln	Cys	Asn	Cys	Gln	Glu	Gly	Trp	Gly	Gly	Leu	Phe	Cys	Asn	Gln	
149					280					285						290	
151	GAC	CTG	AAC	TAC	TGC	ACT	CAC	CAC	AAG	CCA	TGC	AAG	AAT	GGT	GCC	ACA	1206
152	Asp	Leu	Asn	Tyr	Cys	Thr	His	His	Lys	Pro	Cys	Lys	Asn	Gly	Ala	Thr	
153					295					300						310	
155	TGC	ACC	AAC	ACC	GGT	CAG	GGG	AGC	TAC	ACT	TGT	TCT	TGC	CGA	CCT	GGG	1254
156	Cys	Thr	Asn	Thr	Gly	Gln	Gly	Ser	Tyr	Thr	Cys	Ser	Cys	Arg	Pro	Gly	
157					315					320						325	
159	TAC	ACA	GGC	TCC	AGC	TGC	GAG	ATT	GAA	ATC	AAC	GAA	TGT	GAT	GCC	AAC	1302
160	Tyr	Thr	Gly	Ser	Cys	Glu	Ile	Glu	Ile	Asn	Glu	Cys	Asp	Ala	Asn		
161					330					335						340	
163	CCT	TGC	AAG	AAT	GGT	GGA	AGC	TGC	ACG	GAT	CTC	GAG	AAC	AGC	TAT	TCC	1350
164	Pro	Cys	Lys	Asn	Gly	Gly	Ser	Cys	Thr	Asp	Leu	Glu	Asn	Ser	Tyr	Ser	
165					345					350						355	
167	TGT	ACC	TGC	CCC	CCA	GGC	TTC	TAT	GGT	AAA	AAC	TGT	GAG	CTG	AGT	GCA	1398
168	Cys	Thr	Cys	Pro	Pro	Gly	Phe	Tyr	Gly	Lys	Asn	Cys	Glu	Leu	Ser	Ala	
169					360					365						370	
171	ATG	ACT	TGT	GCT	GAT	GGA	CCG	TGC	TTC	AAT	GGA	GGG	CGA	TGC	ACT	GAC	1446
172	Met	Thr	Cys	Ala	Asp	Gly	Pro	Cys	Phe	Asn	Gly	Gly	Arg	Cys	Thr	Asp	
173					375					380						385	
175	AAC	CCT	GAT	GGT	GGA	TAC	AGC	TGC	CGC	TGC	CCA	CTG	GGT	TAT	TCT	GGG	1494
176	Asn	Pro	Asp	Gly	Gly	Tyr	Ser	Cys	Arg	Cys	Pro	Leu	Gly	Tyr	Ser	Gly	
177					395					400						405	
179	TTC	AAC	TGT	GAA	AAG	AAA	ATC	GAT	TAC	TGC	AGT	TCC	AGC	CCT	TGT	GCT	1542
180	Phe	Asn	Cys	Glu	Lys	Lys	Ile	Asp	Tyr	Cys	Ser	Ser	Ser	Pro	Cys	Ala	
181					410					415						420	
183	AAT	GGA	GCC	CAG	TGC	GTT	GAC	CTG	GGG	AAC	TCC	TAC	ATA	TGC	CAG	TGC	1590
184	Asn	Gly	Ala	Gln	Cys	Val	Asp	Leu	Gly	Asn	Ser	Tyr	Ile	Cys	Gln	Cys	
185					425					430						435	
187	CAG	GCT	GGC	TTC	ACT	GGC	AGG	CAC	TGT	GAC	GAC	AAC	GTG	GAC	GAT	TGC	1638
188	Gln	Ala	Gly	Phe	Thr	Gly	Arg	His	Cys	Asp	Asp	Asn	Val	Asp	Asp	Cys	
189					440					445						450	
191	GCC	TCC	TTC	CCC	TGC	GTC	AAT	GGA	GGG	ACC	TGT	CAG	GAT	GGG	GTC	AAC	1686
192	Ala	Ser	Phe	Pro	Cys	Val	Asn	Gly	Gly	Thr	Cys	Gln	Asp	Gly	Val	Asn	
193					455					460						465	
195	GAC	TAC	TCC	TGC	ACC	TGC	CCC	CCG	GGA	TAC	AAC	GGG	AAG	AAC	TGC	AGC	1734
196	Asp	Tyr	Ser	Cys	Thr	Cys	Pro	Pro	Gly	Tyr	Asn	Gly	Lys	Asn	Cys	Ser	

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266      (i) SEQUENCE CHARACTERISTICS:
267          (A) LENGTH: 728 amino acids
268          (B) TYPE: amino acid
269          (C) STRANDEDNESS:
270          (D) TOPOLOGY: unknown
272      (ii) MOLECULE TYPE: protein
274      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
276 Met Gly Gly Arg Phe Leu Leu Thr Leu Ala Leu Leu Ser Ala Leu Leu
277 1      5      10      15
278 Cys Arg Cys Gln Val Asp Gly Ser Gly Val Phe Glu Leu Lys Leu Gln
279      20      25      30
280 Glu Phe Val Asn Lys Lys Gly Leu Ser Asn Arg Asn Cys Cys Arg
281      35      40      45
282 Gly Gly Gly Pro Gly Gly Ala Gly Gln Gln Gln Cys Asp Cys Lys Thr
283 50      55      60
284 Phe Phe Arg Val Cys Leu Lys His Tyr Gln Ala Ser Val Ser Pro Glu
285 65      70      75      80
286 Pro Pro Cys Thr Tyr Gly Ser Ala Ile Thr Pro Val Leu Gly Ala Asn
287      85      90      95
288 Ser Phe Ser Val Pro Asp Gly Ala Gly Gly Ala Asp Pro Ala Phe Ser
289      100     105     110
290 Asn Pro Ile Arg Phe Pro Phe Gly Phe Thr Trp Pro Gly Thr Phe Ser
291      115     120     125
292 Leu Ile Ile Glu Ala Leu His Thr Asp Ser Pro Asp Asp Leu Thr Thr
293      130     135     140
294 Glu Asn Pro Glu Arg Leu Ile Ser Arg Leu Ala Thr Gln Arg His Leu
295 145     150     155     160
296 Ala Val Gly Glu Glu Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr
297      165     170     175
298 Asp Leu Lys Tyr Ser Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly
299      180     185     190
300 Glu Gly Cys Ser Val Phe Cys Arg Pro Arg Asp Asp Arg Phe Gly His
301      195     200     205
302 Phe Thr Cys Gly Glu Arg Gly Glu Lys Val Cys Asn Pro Gly Trp Lys
303      210     215     220
304 Gly Gln Tyr Cys Thr Glu Pro Ile Cys Leu Pro Gly Cys Asp Glu Gln
305 225     230     235     240
306 His Gly Phe Cys Asp Lys Pro Gly Glu Cys Lys Cys Arg Val Gly Trp
307      245     250     255
308 Gln Gly Arg Tyr Cys Asp Glu Cys Ile Arg Tyr Pro Gly Cys Leu His
309      260     265     270
310 Gly Thr Cys Gln Gln Pro Trp Gln Cys Asn Cys Gln Glu Gly Trp Gly
311      275     280     285
312 Gly Leu Phe Cys Asn Gln Asp Leu Asn Tyr Cys Thr His His Lys Pro
313      290     295     300
314 Cys Lys Asn Gly Ala Thr Cys Thr Asn Thr Gly Gln Gly Ser Tyr Thr
315 305     310     315     320
316 Cys Ser Cys Arg Pro Gly Tyr Thr Gly Ser Ser Cys Glu Ile Glu Ile
317      325     330     335

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Input Set : A:\7326-122

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L:5 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]  
L:13 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]  
L:33 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]  
L:34 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]  
L:61 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1  
L:377 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3  
L:439 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4  
L:798 M:246 W: Invalid value of Alpha Sequence Header Field, [FEATURE:], SeqNo=11  
L:1204 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14  
L:1201 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14  
L:1228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:1243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:1245 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:1266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:1326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:1328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:1404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1406 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23  
L:1433 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24  
L:1510 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26  
L:1665 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33  
L:1684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34  
L:1721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:1723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35  
L:1746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36  
L:1765 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37  
L:1767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37  
L:1812 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40  
L:1816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40  
L:1818 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40  
L:1833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41  
L:1848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42  
L:1891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43  
L:1943 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45  
L:1964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1968 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1972 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1974 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1980 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1982 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46  
L:1997 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47  
L:2075 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51  
L:2094 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52

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L:2096 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52  
L:2228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60  
L:2251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61  
L:2268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62  
L:2270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62  
L:2272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62  
L:2276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62  
L:2295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63  
L:2297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63  
L:2314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64  
L:2316 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64  
L:2611 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=81  
L:2645 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=82  
L:2723 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=86  
L:2762 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=87  
L:2807 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=89  
L:2852 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=91  
L:2897 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=93